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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/600,586 | 06/19/2003 | Ruiwen Zhong | | 5569 |
| 25859 | 7590 | 05/10/2004 | EXAMINER | |
| WEI TE CHUNG FOXCONN INTERNATIONAL, INC. 1650 MEMOREX DRIVE SANTA CLARA, CA 95050 | | | FIGUEROA, FELIX O | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2833 | |

DATE MAILED: 05/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-------------------|--------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/600,586 | ZHONG ET AL. |
| | Examiner | Art Unit |
| | Felix O. Figueroa | 2833 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-11 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 19 June 2003 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>6/19/03</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Claim Objections

Claims 1-10 are objected to because of the following informalities:

In claim 1 line5, "in communicating" should be change to --communicating-- or --in communication--.

Claim 2 recites "a plurality of recess between two adjacent projections" and "a plurality of projections between two adjacent recesses". However, it appears that only one recess is between two adjacent projections and one projection is between two adjacent recesses.

In claim 6 line 4, "the second" should be --a second--.

In claim 7 line 4, --the-- should be inserted prior to "dents".

In claim 10 line 2, --an-- should be inserted prior to "associated".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 5-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. (US 5,975,917) in view of Lee (US 6,638,114).

Wang discloses an electrical connector comprising: a dielectric housing (24) comprising an elongated base having a rear face end a mating portion extending from

the base and having a mating face, the base defining a cavity (38) open to the rear face, the mating portion (30) defining a receiving space (33) open to the mating face and in communicating with the cavity; a terminal subassembly (26) comprising a first and a second terminal modules (26a,26b) stacked together, each of the terminal modules comprising a dielectric body received in the cavity and a plurality of terminals (27), each terminal comprising a retaining portion (54) received in the dielectric body, a contacting portion (52) extending into the receiving space and a tail portion (56) extending beyond the rear face of the base, the dielectric body of the first terminal module comprising a first face and a plurality of projections (62) formed on the first face thereof, the dielectric body of the second terminal module comprising a first face and a plurality of recesses (64) on the first face thereof engaging with the corresponding projections of the first terminal module.

Wang discloses substantially the claimed invention except for the shape of the projections. Lee shows a mechanical interface connection between modules (Fig.11) comprising projections (82) and recesses (72), the projection gradually increasing its width from a first position adjacent to the first face of the dielectric body of the first terminal module to a second position adjacent to a top face of the projection, thus providing a secure connection against vertical separation. This connecting structure is an art recognized equivalent structure for the connecting structure of Wang. Therefore, because these two module connecting structure were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious

to substitute of the connecting structure Lee for the connecting structure Wang to provide a secure connection against vertical separation.

Regarding claim 2, Wang and Lee disclose a plurality of recesses and a plurality of projections.

Regarding claim 3, Lee discloses the projection having a dove-tail shape.

Regarding claim 5, Wang discloses each dielectric body comprises a wedged second face opposite to the first face thereof to interferentially engage with a corresponding wall of the cavity.

Regarding claim 6, Wang discloses the base defining a plurality of holes (44) in two opposite inside walls of the cavity, and wherein the dielectric bodies of the first and the second terminals comprise a plurality of protrusions (66) on the second face thereof to engage with the holes.

Regarding claim 7, Wang disclose the dielectric housing comprising a pair of ribs (36) on two opposite inside walls of the cavity, and wherein each dielectric body comprises a pair of dents (not labeled) at opposite sides thereof, each one of dents of the first terminal module and the corresponding one of dents of the second terminal module form a slot to receive the corresponding rib of the base.

Regarding claim 8, Wang discloses the mating portion defining a plurality of channels in two opposite inside walls of the receiving space (see Fig.4), the terminals being received in the channels.

Regarding claim 9, Wang discloses the base defining a plurality of recesses (44) communicating with the cavity, and each dielectric body defining a plurality of bulges (66) engaging with corresponding recesses of the base.

Regarding claim 10, Wang discloses the terminals being insert-molded in an associated dielectric body.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang and Lee, as applied to claim 3 and further in view of Stenz (US 4,425,018).

Wang, as modified by Lee, discloses substantially the claimed invention except for the protrusion and the cutout. Stenz teaches a dovetail connection arrangement in which a dovetail projection (4) includes a cutout (19) and the recess (5) has a protrusion (18) to restrain movement in the horizontal direction. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the connector of Wang, as modified by Lee, having a cutout and a protrusion, as taught by Stenz, to restrain movement in the horizontal direction.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tsai et al. (US 6,234,834) and Wakata (US 5,643,015) disclose a mechanical interface with dovetail projections.

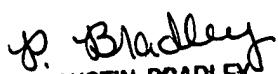
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felix O. Figueroa whose telephone number is (571) 272-2003. The examiner can normally be reached on Mon.-Fri., 10:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 Ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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